








**Return to  
Press  
Releases**

# IXIA Communica

## New IXIA 200 Portable Traffic Generator and Analyzer Is First

**Powerful Desktop Unit Tests Wire-Speed Multi-layer Systems at G 10/100 Mbps Rate.**

*Atlanta, Georgia, Networld+Interop, October 19, 1998 Booth # 3540 -* Communications announces the IXIA 200 desktop portable traffic engine. The new smaller sized unit is fully compatible with the IXIA 1600 the flagship traffic engine. The 200 is a comprehensive testing tool for cert performance and stress testing of Ethernet switches, routers and associated multi-port system holds up to two of IXIA's wide range of load modules. The 200 is designed for 10/100 Mbps environments and will support future WAN interfaces.

The compact 10"x4"x16" unit houses a Pentium class PC and utilizes Windows 95 Operating System. The 200 is ready for connection to the "the-box" via its built in 10/100Mbps Ethernet network interface. Multiple systems can be daisy chained and all ports in the chain synchronized. The units may be remotely managed over TCP/IP networks.

The IXIA 200 Ethernet Load Modules provides very powerful capability. Each port may be configured to send any kind of packet - oversized or error. The traffic may be configured in streams of packets incrementing, decrementing or random MAC addresses. IP addresses "on-the-fly" for testing of Layer 3 switches. The 200 has the unique capability to trigger events and transmit alternate streams temporarily. It supports RIP, OSPF, ARP, intermittent broadcast or error packets transmission.

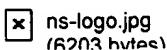
Both the IXIA 200 and 1600 models may be managed via the IxExplorer. Using a monitor, keyboard and mouse the user can configure traffic generators, view statistics, capture and view decoded packets. It also controls all other units for seamless operation in large configurations.

The IXIA product line is fast becoming a test tool of choice for network designers of ISP's and large company networks as well as network equipment manufacturers. The IXIA 200 with four 10/100 Mbps. Ethernet ports and software is priced at \$12,995. An optional suite of test scripts written in the Benchmark Working Group (BMWG) RFC 1944 and RFC 2285 specifications is available.

IXIA Communications is located near Los Angeles in Calabasas, CA, founded by Errol Ginsberg in 1997 and is funded with private venture information contact IXIA Communications, 4505 Las Virgenes Road, Calabasas CA 91302 Telephone 818-871-1800 Fax: 818-871-1800 [info@ixiacom.com](mailto:info@ixiacom.com) or the web <http://web.archive.org/web/20000104213417/http://www.ixiacom.com>

 [Home](#)  [About](#)  [News](#)  [Products](#)  [Contacts](#)  [Careers](#) [

All contents of this site copyright © 1997-1999 Ixia Communications, Inc. All rights reserved. Please direct any com  
[webmaster@ixiacom.com](mailto:webmaster@ixiacom.com).



# IXIA Products

[Welcome](#)[Ixia](#)[About](#)[Ixia News](#)[Contacts](#)[Careers](#)[Support](#)

**The IXIA 1600 is the most comprehensive tool available for testing multi-layer Ethernet switches, routers at 10/100/1000 Mbps.**

The 1600 offers the highest port density available with support for up to 32 Gigabit Ethernet ports and 64 ports of 10/100Mbps operation, or a combination of the two in a single chassis. The highly scalable architecture supports daisy-chaining of up to 256 chassis that may be synchronized to within 40 nanoseconds. Thus, even the most complex systems can be tested thoroughly and cost-effectively.

Gigabit Over Copper.

[Click here](#) for new IXIA LM1000T

IXIA Packet Over SONET.

[Click here](#) for new IXIA LMOC12c Packet Over SONET

Ixia 200.

The IXIA 200 Traffic Generator and Analyzer

Extensive Traffic Generation

The IXIA 1600 provides unparalleled traffic generation capabilities. The user can configure the unit to create any kind of packet — valid packets, undersized or oversized packets, packets with CRC errors, and dribble and alignment errors (10/100 only). On each port, the traffic may be configured into streams of packets with incrementing, decrementing, or random MAC addresses. You may specify the entire contents of the packet and may even generate IP addresses on the fly for effective testing of sophisticated IP switches, supporting tens of thousands of addresses. Up to 256 different streams/port may be defined into a single complex data flow to simulate almost any type of traffic. The 1600 even offers the unique ability to define an interrupt stream which, upon a user-specified trigger or event, temporarily pauses traffic, transmits an alternate stream then continues the original data flow. This can be used to simulate SNMP management packets, routing updates (RIP, OSPF), ARP, intermittent broadcasts, or error packets.

Highly Manageable

Front panel displays give immediate indication of link state, transmission or reception of packets, and error conditions. Ixia's powerful IxExplorer™ MS-Windows95/NT™-based software provides easy configuration, control, and status. The 1600 offers an optional suite of scripts written in the industry-leading scripting language TCL ("tickle"). These scripts implement the popular Benchmark Working Group (BMWG) performance tests specified in RFCs 1242, 1944 and 2285.

## Typical Applications

The IXIA 1600 is an essential tool for Engineering teams who are developing and troubleshooting Ethernet products and is also a must have for Certification departments tasked with specification and performance testing in the lab. It can also be used for production testing and quality assurance during the manufacturing process and even by customer service departments as a troubleshooting tool. Finally, managers of large corporate networks can use it to simulate network changes and additions, and assess the impact prior to making a permanent change.

## System Overview

The Ixia 1600 product family includes chassis, load modules, the IxExplorer Graphical User Interface (GUI), and optional TCL scripts. The chassis can be configured with any mix of load modules, and can be daisy-chained and synchronized to support very large and complex test environments. The IxExplorer software provides complete configuration, control, and monitoring of all Ixia resources in the test network, and the TCL scripts allow the user to rapidly conduct the most popular industry benchmark tests. Ixia currently offers a 16-slot chassis and load modules for Gigabit Ethernet and 10/100 Mbps. Modules that address other topologies are in development.

## IXIA 1600 Chassis

The TE-16 chassis houses up to sixteen load modules of any type — Gigabit Ethernet, 10/100Mbps, or a combination. Load Modules are installed in the front of the chassis, while the back half houses the system controller, on-board configuration software, 10/100 Ethernet management port, trigger-in and daisy-chain in/out ports.

The user can configure and control the unit directly via back-panel connections to a keyboard, mouse, monitor, and printer. Or, one may connect the unit to an Ethernet network and remotely monitor and control it using the IxExplorer GUI or TCL scripts. Multiple users can even access the unit simultaneously using multiple IxExplorer consoles (or TCL), controlling activity of different ports to derive maximum usage from the system.

For larger testing environments, up to 256 chassis may be daisy-chained together and synchronized within 10 nanoseconds.

## Managing the 1600

The 1600 can be managed in a variety of ways — with Ixia's powerful IxExplorer, using TCL scripts over a TCP/IP connection.

## IxExplorer Software

The entire 1600 network can be managed and controlled with the Ixia IxExplorer Windows 95/NT software. IxExplorer is a client-server application that can be run directly on the Ixia 1600 (just attach a keyboard, mouse and monitor) or on any Windows 95/NT PC over a TCP/IP network. The IxExplorer uses the Microsoft Windows Explorer paradigm for its easy-to-use interface. IxExplorer configures and controls traffic generation, monitors statistics and allows viewing of captured packets. The scalable interface can be used across

multiple chassis concurrently for seamless operation of large configurations.

#### Packet Generation

Choosing Packet Streams allows the user to define and configure data flows to be output from the port. Flows are generated by defining one or more streams of data, within each of which is defined the number of data bursts and the number of frames per burst. The structure of each frame is also defined, including preamble, addresses, payload, and forced errors. Stream Control defines the relationship to other streams — continuous, sequential, interrupt, or end stream, and can also be defined to loop back to the top to create complex, continuous data flows.

#### Statistics

The Statistics feature of IxExplorer allows the user to view all or a subset of the statistics available for that port. Statistics for multiple ports can be displayed side-by-side for greater insight into overall traffic patterns. The user may create custom statistic views by defining the which ports and which statistics are in each view. There may be multiple concurrent statistics views running simultaneously.

#### Filters (Per Port)

Comprehensive triggers and filters allow you to capture and count the most complex conditions. There is a trigger to start capture and a separate filter to define what is captured in the circular buffer. There are also several user-definable statistics that may be configured using a variety of elements (DA, SA, good frame, frame size, CRC error, pattern match etc.).

#### Capture View

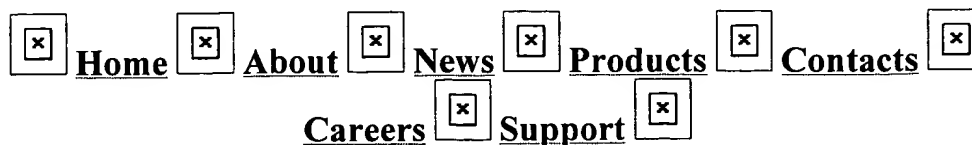
The Capture View shows all data being captured on that port including the frame, a time stamp, destination address, source address, data, frame length, and status.

### TCL Scripts

A comprehensive set of TCL scripts is available for the 1600 which implements a range of pre-built TCL test suites, including RFC1944 (Bradner, McQuaid) and RFC2285 (Mandeville).

### Protocol Support

Protocol editors and decoders are available for TCP, IP, IPX, ARP and others. Upcoming releases with support ARP, , RIP, IGMP 802.1q VLANs. Each port can generate ARP, Ping, OSPF and other user-defined packets at a user-specified frequency. In addition, each port may be assigned a MAC address and an IP address and can then respond to ARP and Ping. All TCL scripts may be configured for layer 2 or layer 3 (IP and IPX). In addition, test are available for IP QoS and IP multicast.



All contents of this site copyright © 1997-1999 Ixia Communications, Inc. All rights reserved. Please direct any comments or questions to: [webmaster@ixiacom.com](mailto:webmaster@ixiacom.com).